



## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 52**

**[EPA-R09-OAR-2019-0709; FRL-10015-58-Region 9]**

#### **Approval of Air Quality Implementation Plans; California; Eastern Kern; 8-Hour Ozone Nonattainment Area Requirements**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve, or conditionally approve, all or portions of three state implementation plan (SIP) revisions submitted by the State of California to meet Clean Air Act (CAA or “the Act”) requirements for the 2008 8-hour ozone national ambient air quality standards (NAAQS or “standards”) in the Eastern Kern, California (“Eastern Kern”) ozone nonattainment area. The three SIP revisions include the “2017 Ozone Attainment Plan For 2008 Federal 75 ppb 8-Hour Ozone Standard,” the Eastern Kern portion of the “2018 Updates to the California State Implementation Plan,” and the “Transportation Conformity Budget State Implementation Plan Update for the Eastern Kern 2017 Ozone Attainment Plan.” In this action, the EPA refers to these submittals collectively as the “2017 Eastern Kern Ozone SIP.” The 2017 Eastern Kern Ozone SIP addresses certain nonattainment area requirements for the 2008 ozone NAAQS, including the requirements for an emissions inventory, attainment demonstration, reasonable further progress, reasonably available control measures, contingency measures, among others; and establishes motor vehicle emissions budgets. The EPA is proposing to approve the 2017 Eastern Kern Ozone SIP as meeting all the applicable ozone nonattainment area requirements except for the contingency measure

requirement, for which the EPA is proposing conditional approval, and the reasonably available control measures and attainment demonstration requirements, for which the EPA is deferring action at this time. In addition, the EPA is beginning the adequacy process for the updated motor vehicle emissions budgets for 2020 in the 2017 Eastern Kern Ozone SIP through this proposed rulemaking.

**DATES:** Written comments must arrive on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R09-OAR-2019-0709 at <https://www.regulations.gov>. For comments submitted at Regulations.gov, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>. If you need assistance in a language other than English or if you are a person with disabilities who needs a reasonable

accommodation at no cost to you, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

**FOR FURTHER INFORMATION CONTACT:** John Ungvarsky, Air Planning Office (AIR-2), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972-3963 or *ungvarsky.john@epa.gov*.

**SUPPLEMENTAL INFORMATION:** Throughout this document, “we,” “us,” and “our” refer to the EPA.

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## **I. Regulatory Context**

### *A. Ozone Standards, Area Designations, and SIPs*

Ground-level ozone pollution is formed from the reaction of volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) in the presence of sunlight.<sup>1</sup> These two pollutants, referred

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<sup>1</sup> The State of California refers to reactive organic gases (ROG) rather than VOC in some of its ozone-related SIP submissions. ROG and VOC refer essentially to the same set of chemical constituents, and for the sake of simplicity, we refer to this set of gases as VOC in this proposed rulemaking.

to as ozone precursors, are emitted by many types of sources, including on- and off-road motor vehicles and engines, power plants and industrial facilities, and smaller area sources such as lawn and garden equipment and paints.

Scientific evidence indicates that adverse public health effects occur following exposure to ozone, particularly in children and adults with lung disease. Breathing air containing ozone can reduce lung function and inflame airways, which can increase respiratory symptoms and aggravate asthma or other lung diseases.<sup>2</sup>

Under section 109 of the CAA, the EPA promulgates NAAQS for pervasive air pollutants, such as ozone. The NAAQS are concentration levels that, the attainment and maintenance of which, the EPA has determined to be requisite to protect public health and welfare. Section 110 of the CAA requires states to develop and submit SIPs to implement, maintain, and enforce the NAAQS.

In 2008, the EPA lowered the 8-hour ozone NAAQS to 0.075 parts per million (ppm) (referred to herein as the “2008 ozone NAAQS”) to replace the 1997 ozone NAAQS of 0.08 ppm.<sup>3</sup> Effective July 20, 2012, the EPA established initial area designations for the 2008 ozone NAAQS. The EPA designated and classified the Eastern Kern portion of Kern County, California,<sup>4</sup> as a “Marginal” nonattainment area for the 2008 ozone NAAQS.<sup>5</sup> For Marginal

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<sup>2</sup> “Fact Sheet – 2008 Final Revisions to the National Ambient Air Quality Standards for Ozone,” dated March 2008.

<sup>3</sup> 73 FR 16436 (March 27, 2008). In terms of parts per billion (ppb), the 2008 ozone NAAQS is 75 ppb. The EPA further tightened the 8-hour ozone NAAQS to 0.070 ppm in 2015 (“2015 ozone NAAQS”), but this proposed action relates to the requirements for the 2008 ozone NAAQS. Information on the 2015 ozone NAAQS is available at 80 FR 65292 (October 26, 2015).

<sup>4</sup> Kern County is located in the southern-most portion of California’s Central Valley. The western half of Kern County is part of the San Joaquin Valley air basin and is included within the San Joaquin Valley ozone nonattainment area. The eastern half of Kern County is part of the Mojave Desert air basin. The Eastern Kern ozone nonattainment area covers the eastern half of the County, excluding Indian Wells Valley. For more detail on the boundaries of the Eastern Kern ozone nonattainment area, see the 2008 ozone table in 40 CFR 81.305.

<sup>5</sup> 77 FR 30088 (May 21, 2012).

ozone nonattainment areas, the attainment date for the 2008 ozone NAAQS is as expeditious as practicable but not later than three years from the effective date of designation, i.e., not later than July 20, 2015.<sup>6</sup>

Under CAA section 181(b)(2), the EPA is required to determine whether an area attained the ozone NAAQS by the applicable attainment date, and in May 2016, the EPA found that Eastern Kern had failed to attain the 2008 ozone NAAQS by the applicable Marginal attainment date (i.e., July 20, 2015) and reclassified the area as “Moderate.”<sup>7</sup> For Moderate ozone nonattainment areas, the attainment date is as expeditious as practicable but not later than July 20, 2018.<sup>8</sup>

In response to the reclassification to Moderate, the Eastern Kern Air Pollution Control District (EKAPCD or “District”) began to develop an ozone plan meeting the applicable ozone nonattainment area requirements, such as an attainment demonstration.<sup>9</sup> However, in light of the attainment demonstration needs for the area, the EKAPCD developed the “2017 Ozone Attainment Plan for the 2008 Federal 75 ppb 8-Hour Ozone Standard” (“Eastern Kern 2017 Ozone Plan”), to meet “Serious,” rather than Moderate, ozone nonattainment requirements, including a base year emissions inventory, emissions statement element, RFP demonstration, attainment demonstration, and a contingency measure element. The Eastern Kern 2017 Ozone Plan also includes a request to the California Air Resources Board (CARB) to formally submit a

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<sup>6</sup> 40 CFR 51.1103(a).

<sup>7</sup> 81 FR 26697 (May 4, 2016).

<sup>8</sup> 40 CFR 51.1103(a).

<sup>9</sup> Under California law, the California Air Resources Board (CARB) is the state agency that is responsible for the adoption and submission to the EPA of California SIPs and SIP revisions, and it has broad authority to establish emissions standards and other requirements for mobile sources. Local and regional air pollution control districts in California are responsible for the regulation of stationary sources and are generally responsible for the development of regional air quality plans. In Eastern Kern, EKAPCD develops and adopts air quality management plans to address CAA planning requirements applicable to that area. Such plans are then submitted to CARB for adoption and submittal to the EPA as revisions to the California SIP.

request to the EPA asking for voluntary reclassification of the Eastern Kern ozone nonattainment area from Moderate to Serious for the 2008 ozone NAAQS.<sup>10</sup>

On July 27, 2017, the EKAPCD adopted the Eastern Kern 2017 Ozone Plan and transmitted the plan to CARB for approval and submittal to the EPA. Through Resolution 17-25 (dated September 28, 2017), CARB adopted the plan and the EKAPCD's request for voluntary reclassification. On October 25, 2017, CARB submitted the Eastern Kern 2017 Ozone Plan to the EPA as a revision to the California SIP. CARB's October 25, 2017 SIP revision submittal constitutes a request for reclassification of the Eastern Kern ozone nonattainment area. In 2018, the EPA approved the reclassification of the Eastern Kern ozone nonattainment area from Moderate to Serious.<sup>11</sup> The SIP revisions that are the subject of this proposed action address certain Serious nonattainment area requirements that apply to Eastern Kern for the 2008 ozone NAAQS.

#### *B. The Eastern Kern Ozone Nonattainment Area*

Eastern Kern is located on the western edge of the Mojave Desert, separated from populated valleys and coastal areas to the west and south by several mountain ranges. Ozone and its precursor emissions transported from these valleys and coastal areas are the major factor affecting ozone exceedances<sup>12</sup> in the nonattainment area. The nonattainment area itself covers approximately 3,100 square miles and has a population of approximately 100,000.<sup>13</sup>

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<sup>10</sup> See page vi of the Eastern Kern 2017 Ozone Plan.

<sup>11</sup> 83 FR 31334 (July 5, 2018).

<sup>12</sup> In this context, "exceedances" refer to daily maximum 8-hour average concentrations that are greater than the level of the standard (i.e., greater than 0.075 ppm).

<sup>13</sup> See Eastern Kern 2017 Ozone Plan, H-8; area (566 square miles) and population (33,000) for Indian Wells Valley were subtracted from the District-wide values on page H-8 to estimate the area and population of the ozone nonattainment area. Indian Wells Valley information is from EKAPCD, Indian Wells Valley Second 10-Year PM<sub>10</sub> Maintenance Plan (May 7, 2020).

The surrounding mountain ranges contain a limited number of passes that serve as transport corridors.<sup>14</sup> The mountain passes include Tehachapi Pass, connecting the western Mojave Desert to the southern San Joaquin Valley, and Soledad Pass and Cajon Pass connecting to the South Coast Air Basin. Eastern Kern is primarily influenced by transport through the Tehachapi Pass corridor with some influence through Soledad Pass.

*C. CAA and Regulatory Requirements for 2008 Ozone Nonattainment Area SIPs*

States must implement the 2008 ozone NAAQS under title I, part D of the CAA, including sections 171-179B of subpart 1 (“Nonattainment Areas in General”) and sections 181-185 of subpart 2 (“Additional Provisions for Ozone Nonattainment Areas”). To assist states in developing effective plans to address ozone nonattainment problems, in 2015, the EPA issued a SIP Requirements Rule (SRR) for the 2008 ozone NAAQS (“2008 Ozone SRR”) that addressed implementation of the 2008 standards, including attainment dates, requirements for emissions inventories, attainment and reasonable further progress (RFP) demonstrations, among other SIP elements, as well as the transition from the 1997 ozone NAAQS to the 2008 ozone NAAQS and associated anti-backsliding requirements.<sup>15</sup> The 2008 Ozone SRR is codified at 40 CFR part 51, subpart AA. We discuss the CAA and regulatory requirements for the elements of 2008 ozone plans relevant to this proposal in more detail below.

The EPA’s 2008 Ozone SRR was challenged, and on February 16, 2018, the U.S. Court of Appeals for the D.C. Circuit (“D.C. Circuit”) published its decision in *South Coast Air Quality*

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<sup>14</sup> See Eastern Kern 2017 Ozone Plan, p. 5.

<sup>15</sup> 80 FR 12264 (March 6, 2015).

*Management District v. EPA*<sup>16</sup> (“*South Coast II*”)<sup>17</sup> vacating portions of the 2008 Ozone SRR.

The only aspect of the *South Coast II* decision that affects this proposed action is the vacatur of the alternative baseline year for RFP plans. More specifically, the 2008 Ozone SRR required states to develop the baseline emissions inventory for RFP plans using the emissions for the most recent calendar year for which states submit a triennial inventory to the EPA under subpart A (“Air Emissions Reporting Requirements”) of 40 CFR part 51, which was 2011. However, the 2008 Ozone SRR allowed states to use an alternative year, between 2008 and 2012, for the baseline emissions inventory provided that the state demonstrated why the alternative baseline year was appropriate. In the *South Coast II* decision, the D.C. Circuit vacated the provisions of the 2008 Ozone SRR that allowed states to use an alternative baseline year for demonstrating RFP.

## **II. Submissions from the State of California to Address 2008 Ozone Requirements in Eastern Kern**

### *A. Summary of Submissions*

In this document, we are proposing action on all or portions of three SIP revisions, which are described in detail in the following paragraphs. Collectively, we refer to the relevant portions of the three SIP revisions as the 2017 Eastern Kern Ozone SIP.

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<sup>16</sup> *South Coast Air Quality Management District v. EPA*, 882 F.3d 1138 (D.C. Cir. 2018) (“*South Coast II*”).

<sup>17</sup> The term “*South Coast II*” is used in reference to the 2018 court decision to distinguish it from a decision published in 2006 also referred to as “*South Coast*.” The earlier decision involved a challenge to the EPA’s Phase 1 implementation rule for the 1997 ozone NAAQS. *South Coast Air Quality Management Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006).



## 1. EKAPCD's Eastern Kern 2017 Ozone Plan

On October 25, 2017, CARB submitted the Eastern Kern 2017 Ozone Plan to the EPA as a revision to the California SIP.<sup>18</sup> The Eastern Kern 2017 Ozone Plan addresses certain nonattainment area requirements for Eastern Kern for the 2008 ozone NAAQS. More specifically, the Eastern Kern 2017 Ozone Plan includes a base year emissions inventory,<sup>19</sup> reasonably available control measure (RACM) demonstration, RFP demonstration, attainment demonstration, contingency measures, motor vehicle emissions budgets (MVEBs or “budgets”) for years 2017 and 2020 and addresses the emissions statement requirement. The appendices to the Eastern Kern 2017 Ozone Plan provide documentation for the emissions inventories, RACM demonstrations for mobile sources and consumer products, and the photochemical modeling conducted in support of the attainment demonstration. Further support for the attainment demonstration is provided in “Staff Report, CARB Review of the Eastern Kern Air Pollution Control District 2017 Ozone Attainment Plan for 2008 Federal 75 ppb 8-Hour Ozone Standard” (“CARB Staff Report”), including a weight of evidence analysis in Appendix A. The October 25, 2017 SIP submittal of the Eastern Kern 2017 Ozone Plan was accompanied by public process documentation at both the District and state levels.

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<sup>18</sup> Letter dated October 25, 2017, from Richard W. Corey, Executive Officer, CARB, to Alexis Strauss, Acting Regional Administrator, EPA Region IX.

<sup>19</sup> The 2012 base year emissions inventory in the Eastern Kern 2017 Ozone Plan supersedes and replaces a previous submittal of the 2012 base year emissions inventory for Eastern Kern in the “8-Hour Ozone State Implementation Plan Emission Inventory Submittal” (the “Multi-Area Emission Inventory”). The Multi-Area Emission Inventory was submitted by CARB on July 17, 2014 and included 2012 base year emissions inventories for 16 nonattainment areas, including Eastern Kern. Relative to the corresponding inventory for Eastern Kern in the Multi-Area Emission Inventory, the 2012 base year emissions inventory in the Eastern Kern 2017 Ozone Plan reflects updated stationary, area, and nonroad source calculations as well as an updated version of the EMFAC model for on-road motor vehicle estimates. On December 18, 2019, CARB withdrew the earlier submitted 2012 base year emissions inventory for Eastern Kern.

Since submittal of the Eastern Kern 2017 Ozone Plan, CARB has replaced or supplemented certain elements of the Eastern Kern 2017 Ozone Plan, including the RFP demonstration, the 2020 budgets, and the contingency measure element, as discussed further below. In this document, we are proposing action on all the elements of the Eastern Kern 2017 Ozone Plan, except for the RFP demonstration, which has been withdrawn, and the RACM and attainment demonstrations for which we are deferring action at this time.

## 2. CARB's 2018 Updates to the California State Implementation Plan

On December 5, 2018, CARB submitted the “2018 Updates to the California State Implementation Plan” (“2018 SIP Update”) to the EPA as a revision to the California SIP.<sup>20</sup> CARB adopted the 2018 SIP Update on October 25, 2018. CARB developed the 2018 SIP Update in response to the court’s decision in *South Coast II* vacating the 2008 Ozone SRR with respect to the use of an alternate baseline year for demonstrating RFP and to provide additional information pertaining to the contingency measure requirement in the wake of the court decision in *Bahr v. EPA*.<sup>21</sup> The 2018 SIP Update includes an RFP demonstration using the required 2011 baseline year for Eastern Kern for the 2008 ozone NAAQS.<sup>22</sup> The RFP demonstration in the 2018 SIP Update for Eastern Kern supersedes and replaces the RFP demonstration in the Eastern Kern 2017 Ozone Plan.<sup>23</sup>

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<sup>20</sup> Letter dated December 5, 2018, from Richard Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region IX.

<sup>21</sup> *Bahr v. EPA*, 836 F.3d 1218 (9th Cir. 2016) (“*Bahr v. EPA*”). In *Bahr v. EPA*, the court rejected the EPA’s longstanding interpretation of CAA section 172(c)(9) as allowing for early implementation of contingency measures. The court concluded that a contingency measure must take effect at the time the area fails to make RFP or attain by the applicable attainment date, not before.

<sup>22</sup> Chapter IV (“SIP Elements for Eastern Kern County”) of the 2018 SIP Update, section IV.B.

<sup>23</sup> In a letter dated December 18, 2019, from Richard W. Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, Region 9, CARB withdrew the RFP demonstration in the Eastern Kern 2017 Ozone Plan.

The 2018 SIP Update also includes supplemental information developed to support the approval of the contingency measure element of the Eastern Kern 2017 Ozone Plan.<sup>24</sup> More recently, the District and CARB have further supplemented the contingency measure element through commitments made in letters submitted to the EPA. In its letter, the District commits to modify at least one specific existing rule to create a contingency measure that will be triggered if the area fails to meet an RFP milestone or to attain the 2008 ozone NAAQS by the applicable attainment date and to transmit the rule or rules, as amended, to CARB for submittal to the EPA.<sup>25</sup> In its letter, CARB commits to submit the revised District rule or rules to the EPA as a SIP revision within 12 months of the EPA's final conditional approval of the contingency measure element of the 2017 Eastern Kern Ozone SIP.<sup>26</sup>

The 2018 SIP Update includes updates for 8 different California ozone nonattainment areas. We have already taken action to approve the Coachella Valley, Imperial County, San Joaquin Valley, South Coast, and Ventura County portions of the 2018 SIP Update.<sup>27</sup> In this document, we are proposing action on the Eastern Kern portion of the 2018 SIP Update.

### 3. Revised Motor Vehicle Emissions Budgets for 2020

On August 31, 2020, CARB submitted the "Transportation Conformity Budget State Implementation Plan Update for the Eastern Kern 2017 Ozone Attainment Plan" ("2020

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<sup>24</sup> Chapter IV ("SIP Elements for Eastern Kern County") of the 2018 SIP Update, section IV.C.

<sup>25</sup> Letter dated September 1, 2020, from Glen E. Stephens, EKAPCD Air Pollution Control Officer, to Richard Corey, CARB Executive Officer, included as an attachment to a letter dated September 18, 2020, from Richard W. Corey, CARB Executive Officer, to John Busterud, EPA Region IX Regional Administrator.

<sup>26</sup> Letter dated September 18, 2020, from Richard W. Corey, CARB Executive Officer, to John Busterud, EPA Region IX Regional Administrator.

<sup>27</sup> 84 FR 11198 (March 25, 2019) (final approval of the San Joaquin Valley portion of the 2018 SIP Update), 84 FR 52005 (October 1, 2019) (final approval of the South Coast portion of the 2018 SIP Update), 85 FR 11817 (February 27, 2020) (final approval of the Imperial County portion of the 2018 SIP Update), 85 FR 11814 (February 27, 2020) and 85 FR 38081 (June 25, 2020) (final approvals of the Ventura County portion of the 2018 SIP Update), and 85 FR 57714 (September 16, 2020) (final approval of the Coachella Valley portion of the 2018 SIP Update).

Conformity Budget Update”) to the EPA as a revision to the California SIP.<sup>28</sup> CARB adopted the Revised 2020 Budgets on July 23, 2020. The 2020 Conformity Budget Update includes revised 2020 budgets for VOC and NO<sub>x</sub> for the Eastern Kern nonattainment area and a demonstration showing consistency between the revised budgets and the RFP demonstration in the 2018 SIP Update. The revised 2020 budgets supersede the 2020 budgets from the Eastern Kern 2017 Ozone Plan.

*B. CAA Procedural Requirements for Adoption and Submission of SIP Revisions*

Sections 110(a) and 110(l) of the CAA require a state to provide reasonable public notice and opportunity for public hearing prior to the adoption and submission of a SIP or SIP revision. To meet this requirement, every SIP submittal should include evidence that adequate public notice was given and an opportunity for a public hearing was provided consistent with the EPA’s implementing regulations in 40 CFR 51.102.

Both the District and CARB have satisfied the applicable statutory and regulatory requirements for reasonable public notice and hearing prior to the adoption and submittal of the SIP revisions that comprise the 2017 Eastern Kern Ozone SIP. With respect to the Eastern Kern 2017 Ozone Plan, the District provided a public review period exceeding 30 days for the draft Eastern Kern 2017 Ozone Plan. On June 22, 2017, the District gave notice in local newspapers<sup>29</sup> of a 30-day public review period for draft Eastern Kern 2017 Ozone Plan and notice of a public hearing to be held on July 27, 2017, for the adoption of the Eastern Kern 2017 Ozone Plan. On July 27, 2017, the District’s Air Pollution Control Board held the public hearing, adopted the

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<sup>28</sup> Submitted electronically on August 31, 2020 as an attachment to a letter dated August 25, 2020, from Richard Corey, CARB Executive Officer, to John Busterud, Regional Administrator, EPA Region IX.

<sup>29</sup> The Bakersfield Californian, The Tehachapi News, and the Daily Independent published the notices on June 22, 2017, June 28, 2017, and June 23, 2017, respectively.

Eastern Kern 2017 Ozone Plan, and directed staff to forward it to CARB for inclusion in the California SIP.<sup>30</sup> No public comments were received during the notice period or at the public hearing.<sup>31</sup>

CARB also provided public notice and opportunity for public comment on the Eastern Kern 2017 Ozone Plan. On August 25, 2017, CARB released for public review its Staff Report for the Eastern Kern 2017 Ozone Plan and gave notice of public meeting to be held on September 28, 2017, to consider adoption of the Eastern Kern 2017 Ozone Plan.<sup>32</sup> On September 28, 2017, CARB held the hearing, adopted the Eastern Kern 2017 Ozone Plan as a revision to the California SIP, and directed the Executive Officer to submit the Eastern Kern 2017 Ozone Plan to the EPA for approval into the California SIP.<sup>33</sup> No public comments were received during the notice period or at the public hearing.<sup>34</sup> On October 25, 2017, the Executive Officer of CARB submitted the Eastern Kern 2017 Ozone Plan to the EPA.

With respect to the 2018 SIP Update, CARB also provided public notice and opportunity for public comment. On September 21, 2018, CARB released for public review the 2018 SIP Update and published a notice of public meeting to be held on October 23, 2018, to consider adoption of the 2018 SIP Update.<sup>35</sup> On October 23, 2018, CARB adopted the 2018 SIP Update.<sup>36</sup> On December 5, 2018, CARB submitted the 2018 SIP Update to the EPA.

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<sup>30</sup> EKAPCD Board Resolution 2017-001-07.

<sup>31</sup> Letter dated August 3, 2017, from Glen E. Stephens, EKAPCD Air Pollution Control Officer, to Richard Corey, Executive Officer, CARB.

<sup>32</sup> Notice of Public Meeting to Consider the 2017 Ozone Attainment Plan for the Eastern Kern Nonattainment Area, dated August 17, 2017, and signed by Richard Corey, Executive Officer, CARB. CARB also posted the public notice on its web site on August 25, 2017.

<sup>33</sup> CARB Resolution 17-25.

<sup>34</sup> Letter dated October 25, 2017, from Richard W. Corey, Executive Officer, CARB, to Alexis Strauss, Acting Regional Administrator, EPA Region IX, and enclosed completeness checklist for Eastern Kern 2017 Ozone Plan.

<sup>35</sup> Notice of Public Meeting to Consider the 2018 Updates to the California State Implementation Plan signed by Richard Corey, Executive Officer, CARB, September 21, 2018.

<sup>36</sup> CARB Resolution 18-50.

With respect to the 2020 Conformity Budget Update, CARB provided public notice and opportunity for public comment. On June 19, 2020, CARB released for public review the draft 2020 Conformity Budget Update and published a notice of public meeting to be held on July 23, 2020, to consider adoption of the revised 2020 budgets.<sup>37</sup> On July 23, 2020, CARB adopted the 2020 Conformity Budget Update,<sup>38</sup> and on August 31, 2020, CARB submitted it to the EPA.

Based on information provided in each of the SIP revisions summarized above, we find that the submittals of the Eastern Kern 2017 Ozone Plan, the 2018 SIP Update, and the 2020 Conformity Budget Update meet the procedural requirements for public notice and hearing in CAA sections 110(a) and 110(l) and 40 CFR 51.102.

### **III. Evaluation of the 2017 Eastern Kern Ozone SIP**

#### *A. Base Year Emissions Inventory*

##### **1. Statutory and Regulatory Requirements**

CAA sections 172(c)(3) and 182(a)(1) require states to submit for each ozone nonattainment area a “base year inventory” that is a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in the area. In addition, the 2008 Ozone SRR requires that the inventory year be selected consistent with the baseline year for the RFP demonstration, which is the most recent calendar year for which a complete triennial inventory is required to be submitted to the EPA under the Air Emissions Reporting Requirements.<sup>39</sup>

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<sup>37</sup> Notice of Public Meeting to Consider Eastern Kern Conformity Budget Update signed by Richard Corey, Executive Officer, CARB, June 19, 2020.

<sup>38</sup> CARB Resolution 20-20.

<sup>39</sup> 2008 Ozone SRR at 40 CFR 51.1115(a) and the Air Emissions Reporting Requirements at 40 CFR part 51, subpart A.

The EPA has issued guidance on the development of base year and future year emissions inventories for ozone and other pollutants.<sup>40</sup> Emissions inventories for ozone must include emissions of VOC and NO<sub>x</sub> and represent emissions for a typical ozone season weekday.<sup>41</sup> States should include documentation explaining how the emissions data were calculated. In estimating mobile source emissions, states should use the latest emissions models and planning assumptions available at the time the SIP is developed.<sup>42</sup>

Future baseline emissions inventories must reflect the most recent population, employment, travel and congestion projections for the area. In this context, future “baseline” emissions inventories refer to emissions estimates for a given year and area that reflect rules and regulations and other measures that are already adopted and that take into account expected growth. Future baseline emissions inventories are necessary to show the projected effectiveness of SIP control measures. Both the base year and future year inventories are necessary for photochemical modeling to demonstrate attainment.

## 2. Summary of State’s Submission

The Eastern Kern 2017 Ozone Plan includes base year (2012) and future year baseline inventories for NO<sub>x</sub> and VOC for the Eastern Kern ozone nonattainment area. Documentation for the inventories is found in Chapter V (“Summary of Emissions Inventory”), Chapter VI (“Emissions Inventories”), and Appendix A of the Eastern Kern 2017 Ozone Plan. The emissions inventories represent average summer day emissions, consistent with the observation that ozone

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<sup>40</sup> “Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations,” EPA-454/B-17-002, May 2017. At the time that the Eastern Kern 2017 Ozone Plan was developed, the following EPA emissions inventory guidance applied:

“Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations,” EPA-454-R-05-001, August 2005.

<sup>41</sup> 40 CFR 51.1115(a) and (c), and 40 CFR 51.1100(bb) and (cc).

<sup>42</sup> 80 FR 12264, at 12290 (March 6, 2015).

levels in Eastern Kern are typically higher from May through October. The 2012 base year and future year inventories in the Eastern Kern 2017 Ozone Plan reflect District rules adopted prior to December 2015 and CARB rules adopted prior to December 2014.<sup>43</sup> The mobile source portions of both base year and projected future year inventories were developed using California's EPA-approved mobile source emissions model, EMFAC2014, for estimating on-road motor vehicle emissions.<sup>44</sup>

Emissions estimates of VOC and NO<sub>x</sub> in the Eastern Kern 2017 Ozone Plan are grouped into the following source categories: stationary, area-wide, on-road motor vehicles, and other mobile (off-road). Stationary sources refer to larger point sources that are subject to District permits and have a fixed geographic location, such as power plants, industrial engines, and oil storage tanks. Area-wide sources are dispersed over a wide geographic area and include sources such as consumer products and architectural coatings. The emissions inventories for the Eastern Kern 2017 Ozone Plan account for smaller permitted stationary sources in the area-wide source categories. The mobile source category is divided into on-road and off-road sources. The on-road sources include such vehicles as light-duty automobiles, light-, medium-, and heavy-duty trucks, and motorcycles. Off-road sources include such vehicles as aircraft, recreational boats, and off-road equipment.

For the Eastern Kern 2017 Ozone Plan, stationary point source emissions for the 2012 base year emissions inventory are based on reported data from facilities using the District's

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<sup>43</sup> Email dated May 18, 2020, from Christine Suarez-Murias, CARB, to John Ungvarsky, EPA Region 9. Also See 2018 SIP Update, A-2.

<sup>44</sup> EMFAC is short for EMISSION FACTOR. In December 2015, the EPA approved EMFAC2014 for SIP development and transportation conformity purposes in California. 80 FR 77337 (December 14, 2015). EMFAC2014 was the most recently approved version of the EMFAC model that was available at the time of preparation of the Eastern Kern 2017 Ozone Plan. On August 15, 2019, the EPA approved an updated version of the EMFAC model, EMFAC2017, for future SIP development and transportation purposes in California. See 84 FR 41717.



annual emissions reporting program, which applies under District Rule 108.2 (“Emission Statement Requirements”) to all stationary sources in Eastern Kern that emit more than 25 tons per year (tpy) or more of VOC or NO<sub>x</sub>. Area sources include smaller emissions sources distributed across the nonattainment area. CARB and the District estimate emissions for area sources using established inventory methods, including publicly-available emission factors and activity information. Area source methodologies are described in Chapter V of the Eastern Kern 2017 Ozone Plan. To improve and update the emissions inventory, District staff evaluate the data and methods used on an annual basis. CARB and District staff coordinate the update process through the State’s Emissions Inventory Technical Advisory Committee.

On-road emissions inventories in the Eastern Kern 2017 Ozone Plan are calculated using CARB’s EMFAC2014 model and vehicle and travel activity data from the California Department of Motor Vehicles and the Kern Council of Governments (COG).<sup>45</sup> CARB uses a suite of models to estimate emissions for off-road equipment categories or, where a new model was not available, the OFFROAD2007 model.<sup>46</sup> CARB provided emissions inventories for off-road equipment, including construction and mining equipment, industrial and commercial equipment, lawn and garden equipment, agricultural equipment, locomotives, and recreational vehicles. Aircraft, locomotive, and recreational boat emissions were allocated based on District estimates.

Table 1 of this document provides a summary of the 2012 base year emissions estimates in tons per day (tpd) (average summer day) for VOC and NO<sub>x</sub>. Based on the inventory for 2012,

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<sup>45</sup> 2017 Federal Transportation Improvement Program, Kern COG, local adoption on September 15, 2016 and federal adoption on December 16, 2016. Available at [https://www.kerncog.org/wp-content/uploads/2019/04/2017\\_FTIPWamend1to19.pdf](https://www.kerncog.org/wp-content/uploads/2019/04/2017_FTIPWamend1to19.pdf).

<sup>46</sup> Eastern Kern 2017 Ozone Plan, 21.

mobile sources are the predominant sources to county-wide VOC emissions, whereas stationary point sources are the predominant sources of NO<sub>x</sub> emissions.

**Table 1 – Eastern Kern 2012 Base Year Emissions Inventory (summer planning inventory, tpd)**

<b>Category</b>	<b>2012</b>	
	<b>VOC</b>	<b>NO<sub>x</sub></b>
Stationary	0.94	16.67
Area Sources	1.12	0.12
On-Road Mobile Sources	2.42	7.61
Other (Off-Road) Mobile Sources	3.91	6.10
ERCs	-----	-----
<b>Total for Eastern Kern Nonattainment Area</b>	8.39	30.50

Source: Eastern Kern 2017 Ozone Plan, Appendix A, Table A-1, and Appendix D.

Following the *South Coast II* decision, CARB submitted the 2018 SIP Update to the EPA to, among other things, revise the RFP demonstration in the Eastern Kern 2017 Ozone Plan based on a 2011 RFP baseline year (i.e., rather than 2012). Our analysis of the emissions inventories for the 2011 RFP baseline year and RFP milestone years 2017 and 2020 can be found in section III.C below.

### 3. The EPA's Review of the State's Submission

We have reviewed the 2012 base year emissions inventory in the Eastern Kern 2017 Ozone Plan and the inventory methodologies used by the District and CARB for consistency with CAA requirements and EPA guidance. First, as required by EPA regulation, we find that the 2012 inventory includes estimates for VOC and NO<sub>x</sub> for a typical ozone season weekday, and that CARB has provided adequate documentation explaining how the emissions are calculated. Second, we find that the 2012 base year emissions inventory in the Eastern Kern 2017 Ozone Plan reflects appropriate emissions models and methodologies, and, therefore, represents a comprehensive, accurate, and current inventory of actual emissions during that year in the Eastern Kern nonattainment area. Third, we find that selection of year 2012 for the base year

emissions inventory is appropriate because it is consistent with the 2011 RFP baseline year (from the 2018 SIP Update) because both inventories are derived from a common set of models and methods. Therefore, the EPA is proposing to approve the 2012 emissions inventory in the Eastern Kern 2017 Ozone Plan as meeting the requirements for a base year inventory set forth in CAA section 182(a)(1) and 40 CFR 51.1115.

## *B. Emissions Statement*

### *1. Statutory and Regulatory Requirements*

Section 182(a)(3)(B)(i) of the Act requires states to submit a SIP revision requiring owners or operators of stationary sources of VOC or NO<sub>x</sub> to provide the state with statements of actual emissions from such sources. Statements must be submitted at least every year and must contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Section 182(a)(3)(B)(ii) of the Act allows states to waive the emissions statement requirement for any class or category of stationary sources that emit less than 25 tpy of VOC or NO<sub>x</sub>, if the state provides an inventory of emissions from such class or category of sources as part of the base year or periodic inventories required under CAA sections 182(a)(1) and 182(a)(3)(A), based on the use of emission factors established by the EPA or other methods acceptable to the EPA.

The 2008 Ozone SRR provides that nonattainment areas are subject to the requirements of subpart 2 of part D of title I of the CAA that apply for that area's classification.<sup>47</sup> For all areas classified under subpart 2, the emissions statement requirement under CAA section 182(a)(3)(B)(i) applies. The preamble of the 2008 Ozone SRR states that if an area has a previously approved emissions statement rule for the 1997 ozone NAAQS or the 1-hour ozone

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<sup>47</sup> 40 CFR 51.1102.

NAAQS that covers all portions of the nonattainment area for the 2008 ozone NAAQS, such rule should be sufficient for purposes of the emissions statement requirement for the 2008 ozone NAAQS.<sup>48</sup> The state should review the existing rule to ensure it is adequate and, if so, may rely on it to meet the emissions statement requirement for the 2008 ozone NAAQS. Where an existing SIP-approved emissions statement rule is adequate to meet the requirements of the 2008 Ozone SRR, states can provide the rationale for that determination to the EPA in a written statement in their SIP submittal for the 2008 ozone NAAQS to meet this requirement. States should identify the various requirements and how each is met by the existing SIP-approved emissions statement program. Where an emissions statement requirement is modified for any reason, the state must provide the revision to the emissions statement rule as part of its SIP.

## 2. Summary of the State's Submission

The Eastern Kern 2017 Ozone Plan addresses compliance with the emissions statement requirement in CAA section 182(a)(3)(B) for the 2008 ozone NAAQS by reference to District Rule 108.2 ("Emission Statement Requirements").<sup>49</sup> District Rule 108.2 requires, among other things, emissions reporting from all Eastern Kern stationary sources of NO<sub>x</sub> and VOC, but provides for waiver of the requirement by the Air Pollution Control Officer for sources that emit less than 25 tpy.<sup>50</sup> The EPA approved District Rule 108.2 as a revision to the Eastern Kern portion of the California SIP in 2004.<sup>51</sup> The District determined in the Eastern Kern 2017 Ozone

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<sup>48</sup> See 80 FR 12264, at 12291 (March 6, 2015).

<sup>49</sup> Eastern Kern 2017 Ozone Plan, 28.

<sup>50</sup> District Rule 108.2 uses the term "reactive organic compounds" (ROG) instead of VOC. As a practical matter, ROG and VOC refer to the same set of chemical constituents, and for the sake of simplicity, we refer to this set of gases as VOC in this proposed rule.

<sup>51</sup> 69 FR 29880 (May 26, 2004).

Plan that the existing provisions of District Rule 108.2 meet the emissions statement requirements for the 2008 ozone NAAQS.<sup>52</sup>

### 3. The EPA's Review of the State's Submission

For this action, we have reviewed EKAPCD's evaluation of SIP-approved District Rule 108.2 for compliance with the specific requirements for emissions statements under CAA section 182(a)(3)(B). We agree with the District that District Rule 108.2 applies within the entire Eastern Kern ozone nonattainment area for the 2008 ozone NAAQS; applies to all stationary sources of VOC and NO<sub>x</sub>, except those emitting less than 25 tpy that the District has waived the requirement (consistent with CAA section 182(a)(3)(B)(ii)); and requires reporting, on an annual basis, of total emissions of VOC and NO<sub>x</sub>. Also, as required under CAA section 182(a)(3)(B), we note that District Rule 108.2 requires certification that the information provided to the District is accurate to the best knowledge of the individual certifying the emissions statement.

Therefore, we propose to approve the emissions statement element of the Eastern Kern 2017 Ozone Plan as meeting the requirements of CAA section 182(a)(3)(B) and the 40 CFR 51.1102.

### *C. Rate of Progress Plan and Reasonable Further Progress Demonstration*

#### 1. Statutory and Regulatory Requirements

Requirements for RFP for ozone nonattainment areas are specified in CAA sections 172(c)(2), 182(b)(1), and 182(c)(2)(B). Under CAA section 171(1), RFP is defined as meaning such annual incremental reductions in emissions of the relevant air pollutant as are required under CAA part D ("Plan Requirements for Nonattainment Areas") or may reasonably be required by the EPA for the purpose of ensuring attainment of the applicable NAAQS by the

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<sup>52</sup> Eastern Kern 2017 Ozone Plan, 28.

applicable date. CAA section 172(c)(2) generally requires that a nonattainment plan include provisions for RFP. CAA section 182(b)(1) specifically requires that ozone nonattainment areas that are classified as Moderate or above demonstrate a 15 percent reduction in VOC between the years of 1990 and 1996. The EPA has typically referred to section 182(b)(1) as the rate of progress (ROP) requirement. For ozone nonattainment areas classified as Serious or higher, section 182(c)(2)(B) requires reductions averaged over each consecutive 3-year period, beginning 6 years after the baseline year until the attainment date, of at least 3 percent of baseline emissions per year. The provisions in CAA section 182(c)(2)(B)(ii) allow an amount less than 3 percent of such baseline emissions each year if the state demonstrates to the EPA that the plan includes all measures that can feasibly be implemented in the area in light of technological achievability.

In the 2008 Ozone SRR, the EPA provides that areas classified Moderate or higher for the 2008 ozone NAAQS will have met the ROP requirements of CAA section 182(b)(1) if the area has a fully approved 15 percent ROP plan for the 1-hour or 1997 ozone NAAQS, provided that the boundaries of the ozone nonattainment areas are the same.<sup>53</sup> For such areas, the EPA interprets the RFP requirements of CAA section 172(c)(2) to require areas classified as Moderate to provide a 15 percent emission reduction of ozone precursors within 6 years of the baseline year. Areas classified as Serious or higher must meet the RFP requirements of CAA section 182(c)(2)(B) by providing an 18 percent reduction of ozone precursors in the first 6-year period, and an average ozone precursor emission reduction of 3 percent per year for all remaining 3-year

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<sup>53</sup> 80 FR 12264, at 12271 (March 6, 2015).

periods thereafter.<sup>54</sup> To meet CAA sections 172(c)(2) and 182(c)(2)(B) RFP requirements, the state may substitute NO<sub>x</sub> emissions reductions for VOC reductions.<sup>55</sup>

Except as specifically provided in CAA section 182(b)(1)(C), emissions reductions from all SIP-approved, federally promulgated, or otherwise SIP-creditable measures that occur after the baseline year are creditable for purposes of demonstrating that the RFP targets are met.

Because the EPA has determined that the passage of time has caused the effect of certain exclusions to be de minimis, the RFP demonstration is no longer required to calculate and specifically exclude reductions from measures related to motor vehicle exhaust or evaporative emissions promulgated by January 1, 1990; regulations concerning Reid vapor pressure promulgated by November 15, 1990; measures to correct previous reasonably available control measure requirements; and, measures required to correct previous inspection and maintenance programs.<sup>56</sup>

The 2008 Ozone SRR requires the RFP baseline year to be the most recent calendar year for which a complete triennial inventory was required to be submitted to the EPA. For the purposes of developing RFP demonstrations for the 2008 ozone NAAQS, the applicable triennial inventory year is 2011. As discussed previously, the 2008 Ozone SRR provided states with the opportunity to use an alternative baseline year for RFP,<sup>57</sup> but that provision of the 2008 Ozone SRR was vacated by the D.C. Circuit in the *South Coast II* decision.

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<sup>54</sup> Id.

<sup>55</sup> 40 CFR 51.1110(a)(2)(i)(C) and 40 CFR 51.1110(a)(2)(ii)(B); and 80 FR 12264, at 12271 (March 6, 2015).

<sup>56</sup> 40 CFR 51.1110(a)(7).

<sup>57</sup> 40 CFR 51.1110(b).

## 2. Summary of the State's Submission

The Eastern Kern 2017 Ozone Plan addresses both the ROP (VOC only) demonstration requirement and the RFP demonstration requirement. With respect to the former, the District cites the EPA's 1997 approval of the ROP demonstration for the 1-hour ozone NAAQS for the District's portion of the San Joaquin Valley nonattainment area and concludes that, based on the 1997 approval, the ROP requirement has been met for Eastern Kern for the 2008 ozone NAAQS.<sup>58</sup>

With respect to the RFP demonstration requirement, the Eastern Kern 2017 Ozone Plan includes an RFP demonstration based on emissions estimates for an RFP baseline year of 2008 and for RFP milestone years 2017 and 2020. CARB developed the emissions estimates for the RFP demonstration in the Eastern Kern 2017 Ozone Plan by applying growth and control profiles to the base year inventory, described in section III.A of this document. Growth profiles for point and area-wide sources are derived from surrogates such as economic activity, fuel usage, population, housing units, etc.<sup>59</sup> Growth projections were obtained from government entities with expertise in developing forecasts for specific sectors, and from econometric models. Control profiles that account for emission reductions resulting from adopted rules and regulations are derived from data provided by the regulatory agencies responsible for the affected emission categories.

Under the EPA's SIP regulations for nonattainment new source review (NSR) programs, a state may allow new major stationary sources or major modifications to use emission reductions credits (ERCs) that were generated through shutdown or curtailed emissions units

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<sup>58</sup> See Eastern Kern 2017 Ozone Plan, 33, and 62 FR 1150, 1172 (January 8, 1997); clarified at 84 FR 45422 (August 29, 2019).

<sup>59</sup> Eastern Kern 2017 Ozone Plan, Table 4: Growth Surrogates for Point and Area-wide Sources, 18-19.



occurring before the base year of an attainment plan. However, to use such ERCs, the projected emissions inventory used to develop the attainment demonstration must explicitly include the emissions from such previously shutdown or curtailed emissions units.<sup>60</sup> The District has elected to provide for use of pre-base year ERCs as offsets by explicitly including such ERCs in the 2020 attainment year inventory.<sup>61</sup> The ERC set-aside in the attainment year (2020) is 0.04 tpd of VOC and 0.12 tpd of NO<sub>x</sub>.<sup>62</sup>

In response to the *South Coast II* decision, which invalidated the use of alternative RFP baseline years such as 2008, CARB revised the RFP demonstration for the Eastern Kern area based on a 2011 baseline year and submitted the revised RFP demonstration for Eastern Kern as part of the 2018 SIP Update.<sup>63</sup> To develop the 2011 RFP baseline inventory, CARB relied on actual emissions reported from industrial point sources for year 2011. The 2011 RFP baseline year emissions for areawide, stationary aggregate sources,<sup>64</sup> and mobile are backcasted from the 2012 base year, relying on the same growth and control methodology as is used for future years. In the 2018 SIP Update, CARB also revised the future baseline emissions projections for years 2017 and 2020 to reflect updated emissions-related information for certain off-road source categories. The emissions projections for 2017 and 2020 in the 2018 SIP Update are essentially the same as those in the Eastern Kern 2017 Ozone Plan except for the projections for certain off-road mobile sources that, as noted, reflect updated information and that are less than the corresponding projections in the Eastern Kern 2017 Ozone Plan.

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<sup>60</sup> 40 CFR 51.165(a)(3)(ii)(C)(1).

<sup>61</sup> Eastern Kern 2017 Ozone Plan, 27-28.

<sup>62</sup> Eastern Kern 2017 Ozone Plan, Appendix D (“Banked Emission Reduction Credits”).

<sup>63</sup> 2018 SIP Update, RFP demonstration, chapter IV (“SIP Elements for Eastern Kern County”), section IV-B (“Reasonable Further Progress”).

<sup>64</sup> CARB describes stationary aggregate sources as categories such as gasoline dispensing facilities that are not inventoried individually but are estimated as a group and reported as an aggregated total. See 2018 SIP Update, A-1.

Table 2 of this document provides a summary of CARB’s 2011 RFP baseline year, 2017 RFP milestone year, and 2020 RFP milestone/attainment year emissions estimates from the 2018 SIP Update. Documentation for the Eastern Kern RFP baseline and milestone emissions inventories is found in the 2018 SIP Update on pages 21-23 and Appendix A on pages A-11 through A-14. For both sets of baseline emissions inventories (those in the Eastern Kern 2017 Ozone Plan and those in the 2018 SIP Update), emissions estimates reflect District rules adopted through December 2015 and CARB rules adopted through December 2014.

**Table 2 – Eastern Kern 2011 Base Year, 2017 and 2020 RFP Milestone Years Emissions Inventories (summer planning inventory, tpd)**

	<b>2011</b>		<b>2017</b>		<b>2020</b>	
<b>Category</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>VOC</b>	<b>NO<sub>x</sub></b>
Stationary	1.0	16.3	1.0	18.6	1.0	19.4
Area Sources	1.1	0.1	1.2	0.1	1.2	0.1
On-Road Mobile Sources	2.6	8.5	1.4	4.2	1.1	3.4
Other (Off-Road) Mobile Sources	4.0	6.0	3.7	5.2	3.6	4.6
<b>Total</b>	<b>8.6</b>	<b>31.0</b>	<b>7.2</b>	<b>28.1</b>	<b>6.8</b>	<b>27.5</b>

Note: The sum of the emissions values may not equal the total shown due to rounding of the numbers.

Source: 2018 SIP Update, pp. 21-23 and Appendix A, A-11 – A-14.

The revised RFP demonstration in the 2018 SIP Update did not include the ERCs included in year 2020 projections in the Eastern Kern 2017 Ozone Plan. However, CARB further revised the RFP demonstration for Eastern Kern in the 2020 Conformity Budget Update and provided a demonstration of how the revised budgets are consistent with the RFP demonstration in the 2018 SIP Update for Eastern Kern, as revised to include the ERCs. Table 3 of this document presents the updated RFP demonstration for Eastern Kern for the 2008 ozone NAAQS as revised by CARB in the 2020 Conformity Budget Update.

**Table 3 – RFP Demonstration for Eastern Kern County for the 2008 Ozone NAAQS  
(summer planning inventory, tpd or percent)**

	VOC		
	2011	2017	2020
Baseline VOC	8.6	7.2	6.9 <sup>a</sup>
2020 Transportation Conformity Safety Margin			0.2
2020 Transportation Conformity Rounding Margin			0.05
Baseline VOC + Safety Margin+ Rounding Margin.		7.2	7.1
Required change since 2011 (VOC or NO <sub>x</sub> ), %		18%	27%
Target VOC level		7.0	6.3
Apparent shortfall (-)/ surplus (+) in VOC		-0.1	-0.9
Apparent shortfall (-)/ surplus (+) in VOC, %		-1.4%	-10.0%
VOC shortfall previously provided by NO <sub>x</sub> substitution, %		0.0%	1.4%
Actual VOC shortfall (-)/ surplus (+), %		-1.4%	-8.6%
	NO <sub>x</sub>		
	2011	2017	2020
Baseline NO <sub>x</sub>	31.0	28.1	27.6 <sup>a</sup>
2020 Transportation Conformity Safety Margin			0.2
2020 Transportation Conformity Rounding Margin			0.04
Baseline NO <sub>x</sub> + Safety Margin + Rounding Margin		28.1	27.9
Change in NO <sub>x</sub> since 2011		2.8	3.1
Change in NO <sub>x</sub> since 2011, %		9.2%	10.1%
NO <sub>x</sub> reductions used for VOC substitution through last milestone year, %		0%	1.4%
NO <sub>x</sub> reductions since 2011 available for VOC substitution in this milestone year, %		9.2%	8.7%
NO <sub>x</sub> reductions since 2011 used for VOC substitution in this milestone year, %		1.4%	8.6%
NO <sub>x</sub> reductions since 2011 surplus after meeting VOC substitution needs in this milestone year, %		7.8%	0.1%
Total shortfall for RFP		0%	0%
RFP met?		Yes	Yes

Note: The sum of the emissions values may not equal the total shown due to rounding of the numbers.

Source: 2020 Conformity Budget Update, 4.

<sup>a</sup> Includes ERCs of 0.04 tpd of VOC and 0.12 tpd of NO<sub>x</sub>. See Eastern Kern 2017 Ozone Plan, Appendix D.

The revised RFP demonstration calculates future year VOC targets from the 2011 baseline, consistent with CAA 182(c)(2)(B)(i), which requires reductions of “at least 3 percent of baseline emissions each year;” and it substitutes NO<sub>x</sub> reductions for VOC reductions beginning

in milestone year 2017 to meet VOC emission targets.<sup>65</sup> For Eastern Kern, CARB concludes that the revised RFP demonstration meets the applicable requirements for both milestone years.

### 3. The EPA's Review of the State's Submission

In 1997 the EPA approved a 15 percent ROP plan for the Kern District portion of the San Joaquin Valley ozone nonattainment area for the 1-hour ozone NAAQS, and the Eastern Kern nonattainment area for the 2008 ozone NAAQS is the same as the Kern District portion of the San Joaquin Valley nonattainment area for the 1-hour ozone NAAQS except that the Eastern Kern nonattainment area (for the 2008 ozone NAAQS) excludes the Indian Wells Valley.<sup>66</sup> Despite the difference in boundaries between the Kern District area approved for the 15 percent ROP and boundaries for the Eastern Kern nonattainment area, the 2008 Ozone SRR allows the District to use the prior approval as justification that the 15 percent ROP has been met for the 2008 ozone NAAQS because the Eastern Kern nonattainment area represents a portion of the area for which EPA has fully approved a 15 percent ROP plan, and none of the Eastern Kern nonattainment area lies outside the area for which the 15 percent ROP plan was approved.<sup>67</sup> As a result, we agree with the District that the District and CARB have met the ROP requirements of CAA section 182(b)(1) for Eastern Kern with respect to the 2008 ozone NAAQS.

With respect to future year baseline projections, we have reviewed the growth and control factors and find them acceptable and conclude that the future baseline emissions projections in the Eastern Kern 2017 Ozone Plan reflect appropriate calculation methods and the latest planning assumptions.

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<sup>65</sup> NO<sub>x</sub> substitution is permitted under EPA regulations. See 40 CFR 51.1110(a)(2)(i)(C) and 40 CFR 51.1110(a)(2)(ii)(B); and 80 FR 12264, at 12271 (March 6, 2015).

<sup>66</sup> 62 FR 1150, at 1183 (January 8, 1997).

<sup>67</sup> See 40 CFR 51.1110(a)(2).

With respect to the RFP demonstration requirement, we note that the future baseline projections for 2017 and 2020 take into account emissions reductions from adopted state and local air pollution control rules and regulations. Generally, to take credit for emissions reductions from state and local control measures (such as adopted state and local rules and regulations) in future baseline projections, the control measures must be approved by the EPA as part of the SIP. For this action, we have reviewed the District's VOC and NO<sub>x</sub> rules that the 2017 Eastern Kern Ozone SIP relied upon in developing future year baseline emissions projections and concluded that emissions reductions from stationary sources assumed by the Eastern Kern 2017 Ozone Plan for future years are supported by rules approved as part of the SIP.<sup>68</sup> With respect to mobile sources, the EPA has taken action in recent years to approve CARB mobile source regulations into the California SIP.<sup>69</sup> Therefore, we find that the future year baseline projections in the Eastern Kern 2017 Ozone Plan are properly supported by SIP-approved stationary and mobile source control measures.

Based on our review of the emissions inventory documentation in the 2017 Eastern Kern Ozone SIP, as discussed above and in section III.A of this document, we find that CARB and the District have used the most recent planning and activity assumptions, emissions models, and methodologies in developing the RFP baseline and milestone year emissions inventories. For these reasons, we have determined that the 2017 Eastern Kern Ozone SIP demonstrates RFP in the 2017 and 2020 milestone years, consistent with applicable CAA requirements and EPA guidance. Therefore, we propose to approve the RFP demonstration for Eastern Kern for the

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<sup>68</sup> EPA, Memorandum to Docket ID EPA-R09-OAR-2019-0709, dated August 26, 2020.

<sup>69</sup> See 81 FR 39424 (June 16, 2016), 82 FR 14446 (March 21, 2017), and 83 FR 23232 (May 18, 2018).

2008 ozone NAAQS under sections 172(c)(2) and 182(c)(2)(B) of the CAA and 40 CFR 51.1110(a)(2)(ii).

#### *D. Contingency Measures*

##### 1. Statutory and Regulatory Requirements

Under the CAA, 8-hour ozone nonattainment areas classified under subpart 2 as Moderate or above must include in their SIPs contingency measures consistent with sections 172(c)(9) and 182(c)(9). Contingency measures are additional controls or measures to be implemented in the event the area fails to make RFP or to attain the NAAQS by the attainment date. The SIP should contain trigger mechanisms for the contingency measures, specify a schedule for implementation, and indicate that the measure will be implemented without significant further action by the state or the EPA.<sup>70</sup>

Neither the CAA nor the EPA's implementing regulations establish a specific level of emissions reductions that implementation of contingency measures must achieve, but the EPA's 2008 Ozone SRR reiterates the EPA's policy that contingency measures should provide for emissions reductions approximately equivalent to one year's worth of progress, amounting to reductions of 3 percent of the RFP baseline emissions inventory for the nonattainment area.<sup>71</sup>

It has been the EPA's longstanding interpretation of section 172(c)(9) that states may rely on federal measures (e.g., federal mobile source measures based on the incremental turnover of the motor vehicle fleet each year) and local measures already scheduled for implementation that provide emissions reductions in excess of those needed to provide for RFP or expeditious attainment. The key is that the statute requires that contingency measures provide for additional

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<sup>70</sup> 70 FR 71612 (November 29, 2005). See also 2008 Ozone SRR, 80 FR 12264, at 12285 (March 6, 2015).

<sup>71</sup> 80 FR 12264, at 12285 (March 6, 2015).

emissions reductions that are not relied on for RFP or attainment and that are not included in the RFP or attainment demonstrations. The purpose of contingency measures is to provide continued emissions reductions while the plan is being revised to meet the missed milestone or attainment date.

The EPA has approved numerous SIPs under this interpretation – i.e., SIPs that use as contingency measures one or more federal or local measures that are in place and provide reductions that are in excess of the reductions required by the attainment demonstration or RFP plan,<sup>72</sup> and there is case law supporting the EPA’s interpretation in this regard.<sup>73</sup> However, in *Bahr v. EPA*, the Ninth Circuit rejected the EPA’s interpretation of CAA section 172(c)(9) as allowing for early implementation of contingency measures.<sup>74</sup> The Ninth Circuit concluded that contingency measures must take effect at the time the area fails to make RFP or attain by the applicable attainment date, not before.<sup>75</sup> Thus, within the geographic jurisdiction of the Ninth Circuit, states cannot rely on early-implemented measures to comply with the contingency measure requirements under CAA section 172(c)(9) and 182(c)(9).<sup>76</sup>

## 2. Summary of the State’s Submission

The District and CARB had largely prepared the Eastern Kern 2017 Ozone Plan prior to the *Bahr v. EPA* decision, and thus, consistent with contingency measure elements of previous

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<sup>72</sup> See, e.g., 62 FR 15844 (April 3, 1997) (direct final rule approving an Indiana ozone SIP revision); 62 FR 66279 (December 18, 1997) (final rule approving an Illinois ozone SIP revision); 66 FR 30811 (June 8, 2001) (direct final rule approving a Rhode Island ozone SIP revision); 66 FR 586 (January 3, 2001) (final rule approving District of Columbia, Maryland, and Virginia ozone SIP revisions); and 66 FR 634 (January 3, 2001) (final rule approving a Connecticut ozone SIP revision).

<sup>73</sup> See, e.g., *LEAN v. EPA*, 382 F.3d 575 (5th Cir. 2004) (upholding contingency measures that were previously required and implemented where they were in excess of the attainment demonstration and RFP SIP).

<sup>74</sup> *Bahr v. EPA*, 836 F.3d 1218, at 1235-1237 (9th Cir. 2016).

<sup>75</sup> *Id.* at 1235-1237.

<sup>76</sup> The *Bahr v. EPA* decision involved a challenge to an EPA approval of contingency measures under the general nonattainment area plan provisions for contingency measures in CAA section 172(c)(9), but, given the similarity between the statutory language in section 172(c)(9) and the ozone-specific contingency measure provision in section 182(c)(9), we find that the decision affects how both sections of the Act must be interpreted.

ozone plans, it relies solely upon surplus emissions reductions from already-implemented control measures to demonstrate compliance with the contingency measure requirements of CAA sections 172(c)(9) and 182(c)(9).<sup>77</sup>

In the 2018 SIP Update, CARB revises the RFP demonstration for the 2008 ozone NAAQS for Eastern Kern and recalculates the extent of surplus emission reductions (i.e., surplus to meeting the RFP milestone requirement for a given milestone year) in the milestone years and estimates the incremental emissions reductions in the year following the attainment year. In light of the *Bahr v. EPA* decision, however, the 2018 SIP Update does not rely on the surplus or incremental emissions reductions to comply with the contingency measures requirements of sections 172(c)(9) and 182(c)(9) but, rather, to provide context in which to evaluate the adequacy of *Bahr*-compliant (i.e., to take effect if triggered) contingency measures for the 2008 ozone NAAQS.<sup>78</sup>

To comply with CAA sections 172(c)(9) and 182(c)(9), as interpreted in the *Bahr v. EPA* decision, the state must develop, adopt, and submit a contingency measure to be triggered upon a failure to meet an RFP milestone or attain the NAAQS by the applicable attainment date regardless of the extent to which already-implemented measures would achieve surplus or incremental emissions reductions beyond those necessary for RFP or attainment of the NAAQS. Therefore, to fully address the contingency measure requirement for the 2008 ozone NAAQS in Eastern Kern, the District has committed to supplement the contingency measure element of the 2017 Eastern Kern Ozone SIP by developing, adopting and submitting a contingency measure to CARB in sufficient time to allow CARB to submit the contingency measure as a SIP revision to

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<sup>77</sup> Eastern Kern 2017 Ozone Plan, chapter XIV. (“Contingency Measures”), 38-39.

<sup>78</sup> 2018 SIP Update, chapter IV (“SIP Elements for Eastern Kern County”), 23-25.



the EPA within 12 months of the EPA's final action on the contingency measure element of the 2017 Eastern Kern Ozone SIP.<sup>79</sup>

The District's commitment is to amend Rule 410 ("Organic Solvents"), and if necessary, Rule 410.8 ("Aerospace Assembly and Coating Operations") or Rule 432 ("Polyester Resin Operations"), through the required public review and subsequent EKAPCD Board approval processes, to apply more stringent requirements upon a determination that the Eastern Kern nonattainment area failed to meet an RFP milestone or failed to attain the 2008 ozone NAAQS by the applicable attainment date. The District anticipates the following types of rule revisions and associated emissions reductions:

- Amend Rule 410 to tighten the control efficiency from 85 percent to 95 percent or to establish a maximum VOC content requirement on all organic solvents over a minimum threshold. The District estimates that these revisions would achieve approximately 0.183 tpd reduction in VOC emissions.
- Amend District Rule 410.8 to require use of more stringent formulations and additional VOC controls. The District estimates that these revisions would achieve approximately 0.014 tpd reduction in VOC emissions.
- Amend Rule 432 to lower the specific material monomer weight percentage and require addition controls at specific emission levels. The District estimates that these revisions would achieve approximately 0.003 tpd reduction in VOC emissions.

CARB attached the District's commitment to revise a rule or rules to include contingency provisions to a letter committing CARB to adopt and submit the revised EKAPCD rule(s) to the

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<sup>79</sup> Letter dated September 1, 2020, from Glen E. Stephens, Air Pollution Control Officer, EKAPCD, to Richard Corey, Executive Officer, CARB.

EPA within one year of the EPA's final conditional approval of the contingency measure element of the 2017 Eastern Kern Ozone SIP.<sup>80</sup>

### 3. The EPA's Review of the State's Submission

CAA sections 172(c)(9) and 182(c)(9) require contingency measures to address potential failure to achieve RFP milestones or failure to attain the NAAQS by the applicable attainment date through implementation of additional emissions controls in the event the area fails to make RFP or to attain the NAAQS by the applicable attainment date. Contingency measures must provide for the implementation of additional emissions controls, if triggered, without significant further action by the state or the EPA.

As discussed above, the 2017 Eastern Kern Ozone SIP provides estimates of emissions reductions that can be considered surplus in that they are beyond the reductions necessary for RFP or attainment, but it does not yet include the type of measure that would implement additional emissions controls, if triggered, without significant further action by the state or the EPA. However, CARB and the District recognize that the 2017 Eastern Kern Ozone SIP needs to be supplemented with such a measure or measures and have submitted commitments to adopt and submit revised District rule(s) with the necessary provisions as a SIP revision within one year of the EPA's final action the contingency measure element of the 2017 Eastern Kern Ozone SIP. The specific types of revisions the District has committed to make, such as tightening control efficiencies or establishing content limits, upon a failure to achieve a milestone or a failure to attain, would comply with the requirements in CAA sections 172(c)(9) and 182(c)(9)

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<sup>80</sup> Letter dated September 18, 2020, from Richard W. Corey, Executive Officer, CARB, to John Busterud, Regional Administrator, EPA Region IX.

because the additional controls would be undertaken if the area fails to achieve a milestone or fails to attain, and would take effect without significant further action by the State or the EPA.

Next, we considered the adequacy of the contingency measure(s) (once adopted and submitted) from the standpoint of the magnitude of emissions reductions the measure would provide (if triggered). Neither the CAA nor the EPA's implementing regulations for the ozone NAAQS establish a specific amount of emissions reductions that implementation of contingency measures must achieve, but we generally expect that contingency measures should provide for emissions reductions approximately equivalent to one year's worth of RFP, which, for ozone, amounts to reductions of 3 percent of the RFP baseline year emissions inventory for the nonattainment area. For the 2008 ozone NAAQS in Eastern Kern, one year's worth of RFP is approximately 0.26 tpd of VOC or 0.93 tpd of NO<sub>x</sub> reductions.<sup>81</sup>

For the purposes of evaluating the adequacy of the emissions reductions from the contingency measures (once adopted and submitted), we find it useful to distinguish between contingency measures to address potential failure to achieve RFP milestones ("RFP contingency measures") and contingency measures to address potential failure to attain the NAAQS ("attainment contingency measures").

With respect to the RFP contingency measure requirement for milestone year 2017, we note that, to address nonattainment area SIP requirements for the 2015 ozone NAAQS, CARB has recently submitted base year (2017) emissions inventories for the various California nonattainment areas for the 2015 ozone NAAQS, including Eastern Kern.<sup>82</sup> We have reviewed

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<sup>81</sup> One year's worth of RFP for Eastern Kern corresponds to 3 percent of the 2011 RFP baseline year inventories for VOC (8.6 tpd) and NO<sub>x</sub> (31.0 tpd).

<sup>82</sup> CARB, Staff Report, 70 ppb Ozone SIP Submittal, submitted by CARB electronically on July 27, 2020 as an attachment to a letter dated July 24, 2020.

the base year (2017) emissions inventory for Eastern Kern and find, based on that inventory, that Eastern Kern has achieved the emissions reductions necessary to meet the RFP requirement for 2017 for the 2008 ozone NAAQS.<sup>83</sup> Because the inventory of actual emissions in 2017 shows that the RFP milestones for 2017 have been met, the contingency measure for failure to meet the 2017 RFP milestones will never be triggered, and therefore, the contingency measure requirement for the 2017 RFP milestone year is now moot.

For the Eastern Kern 2008 ozone Serious nonattainment area, the 2020 RFP milestone coincides with the attainment date, and thus, we review the emissions reductions estimated by the District for the to-be-adopted contingency measure(s) in light of the facts and circumstances in Eastern Kern in the year following the attainment year to determine whether there will be sufficient continued progress in that area in the event the area fails to achieve the 2020 RFP milestone or fails to attain the 2008 ozone NAAQS by 2020 while a new attainment plan is being developed.<sup>84</sup>

As discussed above, given the types of rule revisions under consideration, the District estimates VOC emissions reductions ranging from 0.183 tpd (if only revisions to Rule 410 are adopted) to 0.190 tpd (if revisions are adopted for all three rules under consideration). This amounts to a range of approximately 71 percent to 74 percent of one year's worth of RFP for this area. The EPA normally recommends that contingency measures provide for the equivalent of

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<sup>83</sup> The base year (2017) emissions inventory for Eastern Kern is 7.18 tpd for VOC and 27.01 tpd for NO<sub>x</sub>. The corresponding RFP baseline values from the RFP demonstration for which we are proposing approval herein are 7.2 tpd for VOC and 28.1 tpd for NO<sub>x</sub>. See page 23 of the 2018 SIP Update and page 4 of the 2020 Conformity Budget Update.

<sup>84</sup> CAA section 182(g)(2) provides that states must submit RFP milestone compliance demonstrations within 90 days after the date on which an applicable milestone occurs, except where the milestone and attainment date are the same and the standard has been attained.

one year's worth of progress, and based on the estimates provided by the District, the contingency measure(s) (to be adopted by the District) would fall short of that recommendation.

However, the District's contingency measure(s) would provide additional emissions reductions beyond those that are already expected to occur in the year following the attainment year. Based on emissions inventories in the 2018 SIP Update, emissions in the year following the attainment year (2021) in Eastern Kern are expected to be approximately 0.05 tpd lower for VOC and 0.22 tpd lower for NO<sub>x</sub> than in the attainment year (2020).<sup>85</sup> The downward trend in emissions reflects the continuing benefits of already-implemented measures and is primarily the result of vehicle turnover, which refers to the ongoing replacement by individuals, companies, and government agencies of older, more polluting vehicles and engines with newer vehicles and engines. While the continuing reductions from such already-implemented measures do not constitute contingency measures themselves, they provide context in which we evaluate the adequacy of the contingency measure submitted (or, in this case, to be submitted) to fulfill the requirements of CAA sections 172(c)(9) and 182(c)(9).

In this instance, we find that the emissions reductions from the to-be-adopted contingency measures together with the reductions expected to occur due to already-implemented measures would amount to approximately 114 percent to 117 percent of one year's worth of progress, which is consistent with our guidance recommending that contingency measures provide for one year's worth of progress in the event of a failure to meet an RFP milestone or a failure to attain the NAAQS by the applicable attainment date. Therefore, in light

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<sup>85</sup> Estimates for the emissions reductions in the year following the attainment year are based on the emissions inventories for Eastern Kern in the 2018 SIP Update for years 2021 and 2020 – see pages A-11 – A-14 of the 2018 SIP Update. The estimate of the reductions in emissions of 0.05 tpd of VOC and 0.22 tpd of NO<sub>x</sub> in 2021 (relative to 2020) amounts to approximately 19 percent and 24 percent of one year's worth of progress, respectively in this area based on the 2011 RFP baseline inventory from the 2018 SIP Update.

of the year-to-year reductions in the VOC and NO<sub>x</sub> inventories, we find that the to-be submitted contingency measure(s) would provide sufficient emissions reductions even though reductions from the measures would be lower than the EPA normally recommends for such measures.

For these reasons, and in light of commitments from the District and CARB to adopt and submit a revised District rule(s) that will apply tighter limits or requirements upon a failure to achieve an RFP milestone or the 2008 ozone NAAQS by the applicable attainment date, we propose to approve conditionally the contingency measure element of the 2017 Eastern Kern Ozone SIP as meeting the contingency measure requirements of CAA sections 172(c)(9) and 182(c)(9). Our proposed approval is conditional because it relies upon commitments to adopt and submit a specific enforceable contingency measure (i.e., a revised District rule or rules with contingent provisions). Conditional approvals are authorized under CAA section 110(k)(4).

#### *E. Motor Vehicle Emissions Budgets for Transportation Conformity*

##### **1. Statutory and Regulatory Requirements**

Section 176(c) of the CAA requires federal actions in nonattainment and maintenance areas to conform to the SIP's goals of eliminating or reducing the severity and number of violations of the NAAQS and achieving timely attainment of the standards. Conformity to the SIP's goals means that such actions will not: (1) cause or contribute to violations of a NAAQS, (2) worsen the severity of an existing violation, or (3) delay timely attainment of any NAAQS or any interim milestone.

Actions involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the EPA's transportation conformity rule, codified at 40 CFR part 93, subpart A. Under this rule, metropolitan planning organizations in nonattainment and maintenance areas coordinate with state and local air quality and

transportation agencies, the EPA, the FHWA, and the FTA to demonstrate that an area's regional transportation plans and transportation improvement programs conform to the applicable SIP. This demonstration is typically done by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions budgets (“budgets”) contained in all control strategy SIPs. Budgets are generally established for specific years and specific pollutants or precursors. Ozone plans should identify budgets for on-road emissions of ozone precursors (NO<sub>x</sub> and VOC) in the area for each RFP milestone year and, if the plan demonstrates attainment, the attainment year.<sup>86</sup>

For budgets to be approvable, they must meet, at a minimum, the EPA's adequacy criteria (40 CFR 93.118(e)(4)). To meet these requirements, the budgets must be consistent with the attainment and RFP requirements and reflect all of the motor vehicle control measures contained in the attainment and RFP demonstrations.<sup>87</sup>

The EPA's process for determining adequacy of a budget consists of three basic steps: (1) providing public notification of a SIP submission; (2) providing the public the opportunity to comment on the budget during a public comment period; and, (3) making a finding of adequacy or inadequacy.<sup>88</sup>

## 2. Summary of the State's Submission

The Eastern Kern 2017 Ozone Plan includes budgets for the 2017 RFP milestone year and the 2020 attainment year. The budgets in the Eastern Kern 2017 Ozone Plan are 2 tpd for VOC and 5 tpd for NO<sub>x</sub> for 2017 and 2 tpd for VOC and 4 tpd for NO<sub>x</sub> for 2020. The budgets

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<sup>86</sup> 40 CFR 93.102(b)(2)(i).

<sup>87</sup> 40 CFR 93.118(e)(4)(iii), (iv) and (v). For more information on the transportation conformity requirements and applicable policies on budgets, please visit our transportation conformity web site at: <http://www.epa.gov/otaq/stateresources/transconf/index.htm>.

<sup>88</sup> 40 CFR 93.118(f)(2).

reflect estimates of on-road motor vehicle emissions for a given year that are rounded up to the nearest whole tpd. The “rounding up” convention results in “rounding margins”<sup>89</sup> of 0.65 tpd for VOC and 0.77 tpd for NO<sub>x</sub> for the 2017 budgets and 0.95 tpd for VOC and 0.64 tpd for NO<sub>x</sub> for the 2020 budgets. The budgets for 2017 and 2020 were derived from the 2008 RFP baseline year and the associated RFP milestone years. As such, the budgets are affected by the *South Coast II* decision vacating the alternative baseline year provision, and therefore, the EPA has not previously acted on the budgets. In the submittal letter for the 2017 Eastern Kern Ozone SIP, CARB requested that the EPA limit the duration of our approval of the budgets in the Eastern Kern 2017 Ozone Plan to last only until the effective date of future EPA adequacy findings for replacement budgets.<sup>90</sup>

On December 5, 2018, CARB submitted the 2018 SIP Update, which revised the RFP demonstration for Eastern Kern consistent with the *South Coast II* decision (i.e., by using a 2011 RFP baseline year). The 2018 SIP Update did not identify new budgets for Eastern Kern for VOC and NO<sub>x</sub>; however, when the 2020 budgets, including their rounding margins, and ERCs in the Eastern Kern 2017 Ozone Plan were factored into the revised 2020 RFP demonstration for Eastern Kern in the 2018 SIP Update, Eastern Kern could no longer demonstrate RFP for 2020.

On August 31, 2020,<sup>91</sup> CARB submitted the 2020 Conformity Budget Update that includes revised 2020 budgets. CARB also provided a technical correction to the 2020 RFP demonstration to incorporate the ERCs assumed in the Eastern Kern 2017 Ozone Plan and

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<sup>89</sup> In this context, “rounding margins” refer to the difference between the budget and the estimate of on-road motor vehicle emissions for a given year made using EMFAC2014.

<sup>90</sup> Letter dated October 25, 2017, from Richard Corey, Executive Officer, CARB, to Alexis Strauss, Acting Regional Administrator, EPA Region IX, transmitting the Eastern Kern 2017 Ozone Plan.

<sup>91</sup> Submitted electronically on August 31, 2020 as an attachment to a letter dated August 25, 2020, from Richard Corey, Executive Officer, CARB, to John Busterud, Regional Administrator, EPA Region IX, transmitting the revised 2020 budgets.



provided a demonstration that the 2020 revised budgets (that include much lower rounding margins) are consistent with the RFP demonstration in the 2018 SIP Update, as corrected to include the ERCs.<sup>92</sup> CARB did not request that the EPA limit the duration of our approval of the revised 2020 budgets in the 2020 Conformity Budget Update.<sup>93</sup>

We are proposing action only on the 2020 RFP milestone budgets adopted by CARB in the 2020 Conformity Budget Update for the 2017 Eastern Kern Ozone SIP. CARB did not revise the 2017 RFP milestone year budgets in the Eastern Kern 2017 Ozone Plan because they would only have been used to evaluate regional transportation-related emissions analyses for years 2017 through 2019, and with the passage of time, such analyses are no longer necessary for conformity purposes. Therefore, the EPA is not acting on the 2017 budgets in the Eastern Kern 2017 Ozone Plan.

The revised 2020 budgets in the 2017 Eastern Kern Ozone SIP were derived from motor vehicle emissions estimates prepared using EMFAC2014,<sup>94</sup> and the travel activity data provided by Kern COG. The 2020 budgets for NO<sub>x</sub> and VOC in the 2017 Eastern Kern Ozone SIP are provided in Table 4 of this document. To develop the budgets, the District rounded up the motor vehicle emissions estimates for 2020 to the nearest tenth of a ton and included a safety margin. The budgets for Eastern Kern in 2020 are 1.3 tpd for VOC and 3.6 tpd for NO<sub>x</sub>.

**Table 4 – Transportation Conformity Budgets for the 2008 Ozone NAAQS in Eastern Kern (summer planning inventory, tpd)**

	2020	
	VOC	NO <sub>x</sub>

<sup>92</sup> Id.

<sup>93</sup> Email dated July 28, 2020, from Nesamani Kalandiyur, CARB, to John Ungvarsky, EPA, Region IX, clarifying that CARB would not request the EPA to limit the approval of the budgets.

<sup>94</sup> As previously noted, EMFAC2014 is CARB's model for estimating emissions from on-road vehicles operating in California. See 80 FR 77337 (December 14, 2015). We have announced the availability of an updated version of EMFAC, referred to as EMFAC2017. See 84 FR 41717 (August 15, 2019). For the 2017 Eastern Kern Ozone SIP, EMFAC2014 was the appropriate model to use for SIP development purposes at the time it was prepared.

Baseline Emissions	1.05	3.36
Safety Margin	0.2	0.2
Total	1.25	3.56
Transportation Conformity Budget	1.3	3.6

Source: 2020 Conformity Budget Update, table 3. The budgets reflect a rounding-up convention to the nearest tenth of a tpd.

### 3. The EPA’s Review of the State’s Submission

As part of our review of the approvability of the budgets in the 2017 Eastern Kern Ozone SIP, we have evaluated the budgets using our adequacy criteria in 40 CFR 93.118(e)(4) and (5). We will complete the adequacy review concurrent with our final action on the 2017 Eastern Kern Ozone SIP. The EPA is not required under its transportation conformity rule to find budgets adequate prior to proposing approval of them.<sup>95</sup> In this action, the EPA is announcing that the adequacy process for these budgets begins, and the public has 30 days to comment on their adequacy, per the transportation conformity regulation at 40 CFR 93.118(f)(2)(i) and (ii).

As documented in a separate memorandum included in the docket for this rulemaking, we preliminarily conclude that the budgets in the 2017 Eastern Kern Ozone SIP meet each adequacy criterion.<sup>96</sup> While adequacy and approval are two separate actions, reviewing the budgets in terms of the adequacy criteria informs the EPA’s decision to propose to approve the budgets. We have completed our detailed review of the 2017 Eastern Kern Ozone SIP and are proposing herein to approve the RFP demonstration. We have also reviewed the budgets in the 2017 Eastern Kern Ozone SIP and found that they are consistent with the RFP demonstration for

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<sup>95</sup> Under the transportation conformity regulations, the EPA may review the adequacy of submitted motor vehicle emission budgets simultaneously with the EPA’s approval or disapproval of the submitted implementation plan. 40 CFR 93.118(f)(2).

<sup>96</sup> Memorandum dated September 11, 2020, from Karina O’Connor, Air Planning Office, EPA Region 9, to the docket for this proposed rulemaking, titled “Adequacy Documentation for Plan Motor Vehicle Emission Budgets in 2017 Eastern Kern Ozone SIP.”

which we are proposing approval, are based on control measures that have already been adopted and implemented, and meet all other applicable statutory and regulatory requirements including the adequacy criteria in 40 CFR 93.1118(e)(4) and (5). Therefore, we are proposing to approve the 2020 budgets in the 2017 Eastern Kern Ozone SIP. At the point when we either finalize the adequacy process or approve the budgets for the 2008 ozone NAAQS in the 2017 Eastern Kern Ozone SIP as proposed (whichever occurs first; note that they could also occur concurrently per 40 CFR 93.118(f)(2)(iii)), they will replace the budgets that we previously found adequate for use in transportation conformity determinations.<sup>97</sup>

#### *F. Other Clean Air Act Requirements Applicable to Serious Ozone Nonattainment Areas*

In addition to the SIP requirements discussed in the previous sections, the CAA includes certain other SIP requirements applicable to Serious ozone nonattainment areas, such as Eastern Kern. We describe these provisions and their current status below.

##### **1. Vehicle Inspection and Maintenance Programs**

Section 182(c)(3) of the CAA requires states with ozone nonattainment areas classified under subpart 2 as Serious or above to implement an enhanced motor vehicle inspection/maintenance (I/M) program in each urbanized area (in the nonattainment area), as defined by the Bureau of the Census, with a 1980 population of 200,000 or more. The requirements for those programs are provided in CAA section 182(c)(3) and 40 CFR part 51, subpart S.

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<sup>97</sup> In November 2008, we found adequate the 2008 budgets from the “Eastern Kern County 2008 8-hour Ozone Early Progress Plan,” February 28, 2008. See 73 FR 71643 (November 25, 2008). The 2008 budgets are 5 tpd for VOC and 18 tpd for NO<sub>x</sub>.

An enhanced vehicle I/M program is not required in Eastern Kern because the area does not meet the population threshold in CAA section 182(c)(3).<sup>98</sup> The area is also not subject to the basic vehicle I/M program requirement, once again, because it does not meet the population threshold for implementation of such a program.<sup>99</sup> The State of California has, however, decided to implement a basic I/M vehicle program in Eastern Kern as part of the ozone control strategy for the area. We most recently approved California's I/M program in 2010.<sup>100</sup>

## 2. New Source Review Rules

Section 182(a)(2)(C) of the CAA requires states to develop SIP revisions containing permit programs for each of its ozone nonattainment areas. The SIP revisions are to include requirements for permits in accordance with CAA sections 172(c)(5) and 173 for the construction and operation of each new or modified major stationary source for VOC and NO<sub>x</sub> anywhere in the nonattainment area. The 2008 Ozone SRR includes provisions and guidance for nonattainment NSR programs.<sup>101</sup>

The 2017 Eastern Kern Ozone SIP cites District Rule 210.1 ("New and Modified Stationary Source Review (NSR)"), as amended by the District on May 4, 2000, as the rule that meets Serious area requirements for nonattainment NSR.<sup>102</sup> CARB has submitted District Rule 210.1 to the EPA, but we have not taken action yet on it. More recently, CARB has submitted a new District rule, Rule 210.1A ("Major New and Modified Stationary Source Review (MNSR)"), that includes new and revised terms and definitions to meet certain additional NSR requirements. We will be taking action as necessary on District Rules 210.1 and 210.1A in a

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<sup>98</sup> 40 CFR 51.390(a)(9).

<sup>99</sup> 40 CFR 51.390(a)(4).

<sup>100</sup> 75 FR 38023 (July 1, 2010). See, also, the related proposed rule at 74 FR 41818, at 41823 (August 19, 2009).

<sup>101</sup> 80 FR 12264 (March 6, 2015).

<sup>102</sup> Eastern Kern 2017 Ozone Plan, 30.

separate rulemaking and will evaluate compliance with Serious area NSR nonattainment requirements at that time.

### 3. Clean Fuels Fleet Program

Sections 182(c)(4)(A) and 246 of the CAA require California to submit to the EPA for approval measures to implement a Clean Fuels Fleet Program. Section 182(c)(4)(B) of the CAA allows states to opt-out of the federal clean-fuel vehicle fleet program by submitting a SIP revision consisting of a program or programs that will result in at least equivalent long-term reductions in ozone precursors and toxic air emissions.

In 1994, CARB submitted a SIP revision to the EPA to opt-out of the federal clean-fuel fleet program. The submittal included a demonstration that California's low-emissions vehicle program achieved emissions reductions at least as large as would be achieved by the federal program. The EPA approved the SIP revision to opt-out of the federal program on August 27, 1999.<sup>103</sup> There have been no changes to the federal Clean Fuels Fleet program since the EPA approved the California SIP revision to opt-out of the federal program, and no corresponding changes to the SIP are required. Thus, we find that the California SIP revision to opt-out of the federal program, as approved in 1999, meets the requirements of CAA sections 182(c)(4)(A) and 246 for Eastern Kern for the 2008 ozone NAAQS.

### 4. Gasoline Vapor Recovery

Section 182(b)(3) of the CAA requires states to submit a SIP revision by November 15, 1992, that requires owners or operators of gasoline dispensing systems to install and operate gasoline vehicle refueling vapor recovery ("Stage II") systems in ozone nonattainment areas

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<sup>103</sup> 64 FR 46849 (August 27, 1999).

classified as Moderate and above. California's ozone nonattainment areas implemented Stage II vapor recovery well before the passage of the CAA Amendments of 1990.<sup>104</sup>

Section 202(a)(6) of the CAA requires the EPA to promulgate standards requiring motor vehicles to be equipped with onboard refueling vapor recovery (ORVR) systems. The EPA promulgated the first set of ORVR system regulations in 1994 for phased implementation on vehicle manufacturers, and since the end of 2006, essentially all new gasoline-powered light- and medium-duty vehicles are ORVR-equipped.<sup>105</sup> Section 202(a)(6) also authorizes the EPA to waive the SIP requirement under CAA section 182(b)(3) for installation of Stage II vapor recovery systems after such time as the EPA determines that ORVR systems are in widespread use throughout the motor vehicle fleet. Effective May 16, 2012, the EPA waived the requirement of CAA section 182(b)(3) for Stage II vapor recovery systems in ozone nonattainment areas regardless of classification.<sup>106</sup> Thus, a SIP submittal meeting CAA section 182(b)(3) is not required for the 2008 ozone NAAQS.

While a SIP submittal meeting CAA section 182(b)(3) is not required for the 2008 ozone NAAQS, under California state law (i.e., Health and Safety Code section 41954), CARB is required to adopt procedures and performance standards for controlling gasoline emissions from gasoline marketing operations, including transfer and storage operations. State law also authorizes CARB, in cooperation with local air districts, to certify vapor recovery systems, to identify defective equipment and to develop test methods. CARB has adopted numerous revisions to its vapor recovery program regulations and continues to rely on its vapor recovery program to achieve emissions reductions in ozone nonattainment areas in California.

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<sup>104</sup> General Preamble, 57 FR 13498 at 13514 (April 16, 1992).

<sup>105</sup> 77 FR 28772, at 28774 (May 16, 2012).

<sup>106</sup> See 40 CFR 51.126(b).

In Eastern Kern, the installation and operation of CARB-certified vapor recovery equipment is required and enforced through District Rule 412.1 (“Transfer of Gasoline into Vehicle Fuel Tanks”), most recently approved into the SIP on October 7, 1996.<sup>107</sup>

## 5. Enhanced Ambient Air Monitoring

Section 182(c)(1) of the CAA requires that all ozone nonattainment areas classified as Serious or above implement measures to enhance and improve monitoring for ambient concentrations of ozone, NO<sub>x</sub>, and VOC, and to improve monitoring of emissions of NO<sub>x</sub> and VOC. The enhanced monitoring network for ozone is referred to as the photochemical assessment monitoring station (PAMS) network. The EPA promulgated final PAMS regulations on February 12, 1993.<sup>108</sup>

On November 10, 1993, CARB submitted to the EPA a SIP revision addressing the PAMS network for six ozone nonattainment areas in California, including San Joaquin Valley (which then included Eastern Kern), to meet the enhanced monitoring requirements of CAA section 182(c)(1) and the PAMS regulations. The EPA determined that the PAMS SIP revision met all applicable requirements for enhanced monitoring and approved the PAMS submittal into the California SIP.<sup>109</sup>

Prior to 2006, the EPA’s ambient air monitoring regulations in 40 CFR part 58 (“Ambient Air Quality Surveillance”) set forth specific SIP requirements (see former 40 CFR 52.20). In 2006, the EPA significantly revised and reorganized 40 CFR part 58.<sup>110</sup> Under revised 40 CFR part 58, SIP revisions are no longer required; rather, compliance with EPA monitoring

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<sup>107</sup> 61 FR 52297 (October 7, 1996).

<sup>108</sup> 58 FR 8452 (February 12, 1993).

<sup>109</sup> 82 FR 45191 (September 28, 2017).

<sup>110</sup> 71 FR 61236 (October 17, 2006).

regulations is established through review of required annual monitoring network plans.<sup>111</sup> The 2008 Ozone SRR made no changes to these requirements.<sup>112</sup>

The 2017 Eastern Kern Ozone SIP does not specifically address the enhanced ambient air monitoring requirement in CAA section 182(c)(1). However, we note that CARB includes the ambient monitoring network within Eastern Kern in its annual monitoring network plan that is submitted to the EPA, and that we have approved the most recent annual monitoring network plan (“Annual Network Plan Covering Monitoring Operations in 25 California Air Districts, July 2019” (“2019 ANP”)) with respect to the Eastern Kern element.<sup>113</sup> In addition, CARB has fulfilled the requirement under 40 CFR part 58, Appendix D, section 5(h), to submit an enhanced monitoring plan for Eastern Kern.<sup>114</sup> Based on our review and approval of the 2019 ANP with respect to Eastern Kern and our earlier approval of the PAMS SIP revision, we propose to find that the enhanced monitoring requirements under CAA section 182(c)(1) for Eastern Kern have been met with respect to the 2008 ozone NAAQS.

#### **IV. Proposed Action**

For the reasons discussed herein, under CAA section 110(k)(3), the EPA is proposing to approve as a revision to the California SIP the following portions of the 2017 Eastern Kern Ozone SIP submitted by CARB on October 25, 2017, December 5, 2018, and August 31, 2020:

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<sup>111</sup> 40 CFR 58.2(b) now provides that, “The requirements pertaining to provisions for an air quality surveillance system in the SIP are contained in this part.”

<sup>112</sup> The 2008 ozone SRR addresses PAMS-related requirements at 80 FR 12264, at 12291 (March 6, 2015).

<sup>113</sup> Letter dated November 26, 2019, from Gwen Yoshimura, Manager, Air Quality Analysis Office, EPA Region IX, to Ravi Ramalingam, Chief, Consumer Products and Air Quality Assessment Branch, Air Quality Planning and Science Division, CARB.

<sup>114</sup> Letter dated November 25, 2019, from Dr. Michael T. Benjamin, Chief, Air Quality Planning and Science Division, CARB, to Mr. Mike Stoker, Regional Administrator, EPA Region IX, enclosing the “2019 Enhanced Monitoring Plan (November 2019)”.



- Base year emissions inventory element in the Eastern Kern 2017 Ozone Plan as meeting the requirements of CAA sections 172(c)(3) and 182(a)(1) and 40 CFR 51.1115 for the 2008 ozone NAAQS;
  - Emissions statement element in the Eastern Kern 2017 Ozone Plan as meeting the requirements of CAA section 182(a)(3)(B) and 40 CFR 51.1102 for the 2008 ozone NAAQS;
  - ROP demonstration element in the Eastern Kern 2017 Ozone Plan as meeting the requirements of CAA 182(b)(1) and 40 CFR 51.1110(a)(2) for the 2008 ozone NAAQS;
  - RFP demonstration element in Chapter IV of the 2018 SIP Update, as corrected in the 2020 Conformity Budget Update, as meeting the requirements of CAA sections 172(c)(2) and 182(c)(2)(B), and 40 CFR 51.1110(a)(2)(ii) for the 2008 ozone NAAQS;
  - Motor vehicle emissions budgets in the 2020 Conformity Budget Update for the RFP milestone/attainment year of 2020 (as shown in Table 4 of this document) because they are consistent with the RFP demonstration for 2020 for the 2008 ozone NAAQS proposed for approval herein and meet the other criteria in 40 CFR 93.118(e); and
- We are also proposing to find that the:

- California SIP revision to opt-out of the federal Clean Fuels Fleet Program meets the requirements of CAA sections 182(c)(4)(A) and 246 and 40 CFR 51.1102 for the 2008 ozone NAAQS with respect to Eastern Kern; and
- Requirements for enhanced monitoring under CAA section 182(c)(1) and 40 CFR 51.1102 for Eastern Kern for the 2008 ozone NAAQS have been met.

In addition, we are proposing, under CAA section 110(k)(4), to approve conditionally the contingency measure element of the 2017 Eastern Kern Ozone SIP as meeting the requirements

of CAA sections 172(c)(9) and 182(c)(9) for RFP and attainment contingency measures. Our proposed approval is based on commitments by the District and CARB to supplement the element through submission, as a SIP revision (within one year of our final conditional approval action), of a revised District rule or rules that would add new limits or other requirements if an RFP milestone is not met or if Eastern Kern fails to attain the 2008 ozone NAAQS by the applicable attainment date.<sup>115</sup>

The EPA is soliciting public comments on the issues discussed in this document. We will accept comments from the public on this proposal for the next 30 days and will consider comments before taking final action.

## **V. Statutory and Executive Order Reviews**

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely proposes to approve, or conditionally approve, state plans as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action

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<sup>115</sup> Letter dated September 1, 2020, from Glen E. Stephens, Air Pollution Control Officer, EKAPCD, to Richard Corey, Executive Officer, CARB; and letter dated September 18, 2020, from Richard W. Corey, Executive Officer, CARB, to John Busterud, Regional Administrator, EPA Region IX.

because SIP approvals are exempted under Executive Order 12866;

- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have tribal implications and will not

impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: October 6, 2020.

John Busterud,  
Regional Administrator,  
Region IX.

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